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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/623,952	12/21/2000	Boaz Porat	A33475 PCTUS	2025
21003	7590	10/04/2004	EXAMINER	
BAKER & BOTTS 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			AHN, SAM K	
			ART UNIT	PAPER NUMBER
			2637	

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/623,952

Applicant(s)

PORAT ET AL.

Examiner

Sam K. Ahn

Art Unit

2637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on amendment, received on 5/26/04.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 15-26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 May 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. The elements in Fig.1 need to have descriptive label, in conformance with 37 CFR 1.84(n) and 1.84(o). For example, a descriptive label of "master modem " should be inserted into 1 of Fig.1 to properly describe element.

### ***Specification***

2. For the formality of the application under the present office practice, applicant(s) is required to replace "Claims" with "I or We Claim", "The Invention Claimed Is" (or the equivalent) before the Claims part of the specification of the instant application. See MPEP 608.01(m).

### ***Claim Objections***

3. Claims 15-26 are objected to because of the following informalities:

In claims 15-17 and 24-26, please change the capital letters to small letters for each of the first words describing the method steps and the elements in the apparatus claims.

In claim 15, line 1, delete "recovery from transmitted data" and insert "recovery of transmitted data".

In claim 15, lines 4,6,8,9 and 11, delete "modem" and insert "XDSL modem".

In claim 15, line 8, delete "the transmission" and insert "the XDSL transmission".

In claim 15, line 9, delete "mater" and insert "master XDSL".

In claim 15, line 11, delete "slave modem" and insert "slave XDSL modem".

In claim 15, line 11, delete "a sequence" and insert "said sequence".

In claim 15, line 16, delete "the data" and insert "the digitally converted data".

In claim 15, line 20, delete "each re-sampled" and insert "each of said re-sampled".

In claim 15, line 26, delete "normalized line" and insert "normalized spectral line".

In claim 15, line 26, delete "the incoming symbols" and insert "the sequence of symbols".

In claim 16, line 3, delete "modem" and insert "XDSL modem".

In claim 16, lines 5-11 comprises steps already recited in claim 15, therefore suggests deleting the steps and suggests including the statement such as "and further including the steps of (e) filtering.... and (j) using...".

In claim 16, line 12, delete "(4)" and insert "(d)".

In claim 16, line 14, delete "the spectral" and insert "a spectral".

In claim 16, line 17, delete "(6)" and insert "(f)".

In claim 16, line 18, delete "(7)" and insert "(g)".

In claim 16, line 21, delete "(the master modem clock frequency)" and insert "or a clock frequency of the master XDSL modem".

In claim 16, line 22, delete "supplied to the" and insert "supplied to the frequency controlled".

In claim 16, line 23, delete "(8)" and insert "(h)".

In claim 16, line 24, delete "a second accumulator" and insert "an accumulator".

In claim 16, line 24, delete "the control word" and insert "the digital control signal".

In claim 16, line 25, delete "(9)" and insert "(i)".

Art Unit: 2637

In claim 17, line 5, delete "said decisions" and insert "said symbol state data decisions".

In claim 17, line 6, delete "circuitry".

In claim 17, line 8, delete "the outputs" and insert "the I and Q outputs".

In claim 17, lines 8-9, delete "I and Q inputs, respectively".

In claim 17, line 10, delete "symbols" and insert "symbol".

In claim 17, lines 11-12, delete "from blind mode timing recovery" and insert "from a blind timing recovery mode".

In claim 18, line 1, delete "the transmission" and insert "the XDSL transmission".

In claim 19, lines 1-2, delete "the pair of copper wires is a telephone line." and insert "the copper wires are telephone lines.".

In claim 20, line 1, delete "the tracking" and insert "the frequency controlled clock tracking".

In claim 20, line 2, delete "phase-locked loop" and insert "PLL".

In claim 21, line 1, delete "recovery is" and insert "recovery mode is".

In claim 23, line 1, delete "recovery is" and insert "recovery mode is".

In claim 23, line 2, delete "using full" and insert "using a full".

In claim 24, line 3, delete "Digital to Analog Converter (DAC) means" and insert "DAC means".

In claim 24, line 5, delete "the double" and "the rounded" and insert "a double" and "a rounded", respectively.

Art Unit: 2637

In claim 24, lines 7 and 8, respectively, delete "secondary accumulator" and insert "accumulator".

In claim 24, line 10, delete "according the" and insert "according to the".

In claim 24, line 12 and 14-15, respectively, delete "the output value" and insert "the result of step d)".

In claim 25, line 1, delete "An XDSL modem" and insert "An XDSL master modem".

In claim 25, line 2, delete "signal transmitted by a master" and insert "signal is transmitted by the master".

In claim 25, line 6, delete "A first Analog" and insert "an analog".

In claim 25, line 7, delete "received signal" and insert "received data signal".

In claim 25, line 8, delete "the first Analog" and insert "the Analog".

In claim 25, line 9, delete "sampled data" and insert "sampled and digitized data".

In claim 25, line 9, delete "said first" and insert "one of said two first".

In claim 25, line 12, delete "to the first" and insert "to the two first".

In claim 25, line 12, delete "the master" and insert "the XDSL master".

In claim 25, line 14, delete "the means for sampling" and insert "the sampling means".

In claim 25, line 19, delete "the second" and insert "the four second".

In claim 25, line 26, delete "the third" and insert "the at least one third".

In claim 25, line 26, delete "filters" and insert "filter".

In claim 25, line 32, delete "(the master modem clock frequency)" and insert "or a clock frequency of the XDSL master modem".

In claim 25, line 33, delete "A second Digital" and insert "a Digital".

In claim 25, line 34, delete "the tracking" and insert "the frequency controlled clock tracking".

In claim 25, line 39, delete "date" and insert "data".

In claim 25, line 43, delete "symbols" and insert "symbol".

In claim 25, line 44, delete "blind" and "data" and insert "a blind" and "a data", respectively.

In claim 25, line 45, delete "the error" and insert "the extracted symbol error rate".

In claim 26, line 1, delete "The modem" and insert "The XDSL master modem".

In claim 26, line 1, delete "wherein the modem" and insert "wherein the XDSL master modem".

In claim 26, line 3, delete "the second DAC" and insert "the DAC".

In claim 26, line 5, delete "the double" and insert "a double".

In claim 26, line 6, delete "the rounded" and insert "a rounded".

In claim 26, line 7, delete "a secondary accumulator" and insert "an accumulator".

In claim 26, line 8, delete "signal of the secondary" and insert "signal of the".

In claim 26, line 11, delete "second DAC's" and insert "DAC's".

In claim 26, line 14, delete "(i1)" and insert "(g)".

In claim 26, line 14, delete "second DAC's" and insert "DAC's".

In claim 26, line 15, delete "the output value" and insert "the result of the comparator".

In claim 26, line 15, delete "second DAC's LSB, and" and insert "DAC's" LSB, or".

In claim 26, line 16, delete "(i2)" and insert "(h)".

In claim 26, line 16, delete "second DAC's" and insert "DAC's".

In claim 26, line 17, delete "the output value" and insert "the result of the comparator".

In claim 26, line 17, delete "second DAC's LSB." and insert "DAC's" LSB.".

Claim 22 directly depends on claim 21. Appropriate correction is required.

### ***Conclusion***

4. This application is in condition for allowance except for the following formal matters:

Drawings, Specification and Claim Objections.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Ahn whose telephone number is (571) 272-3044. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR



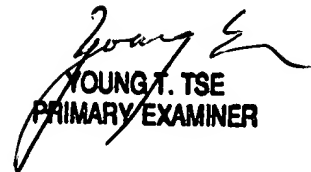
Application/Control Number: 09/623,952

Page 8

Art Unit: 2637

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sam K. Ahn  
9/28/04

  
YOUNG T. TSE  
PRIMARY EXAMINER